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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,472

07/06/2006

Noriaki Onodera

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EXAMINER

YEE, DEBORAH

ART UNIT

PAPER NUMBER

1793

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,472	<b>Applicant(s)</b> ONODERA ET AL.	
	<b>Examiner</b> Deborah Yee	<b>Art Unit</b> 1793	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 8 to 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 10 to 12 is/are rejected.
- 7) ☒ Claim(s) 7-9, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 10, 2009 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 7 recites a method wherein step b in parent claim 1 precedes step c. This sequence in cooling steps is indefinite because step c is performed at 800 to 400°C and should occur before step b performed at 400 to 250°C. To overcome rejection, it is recommended to incorporate the limitation of claim 13 to claim 7.

5. Claim 9 recites a method wherein step b in parent claim 1 precedes step d. This sequence in cooling steps is indefinite because step d is performed at a higher temperature range than step b. To overcome rejection, it is recommended to incorporate the limitation of claim 14 to claim 9.

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6. Claim 8 recites “performing accelerate cooling at a head and a foot of the rail in the upright position at a speed of substantially 1°C per second to 20°C per second, wherein the accelerated cooling is performed **when** one of (i) a surface temperature of at least the head is in a temperature range of substantially 550°C to 450°C and (ii) the surface temperature of the foot of the rail is in a temperature range of substantially 500°C to 450°C”, which does not clearly define the present invention as described in the specification. According to paragraph [0035] on page 12 of Applicant’s specification, the method of present invention performs accelerated cooling **until** said surface temperature of head and foot are reached, and paragraph [0050] on page 19 teaches forcibly cooling high temperature rail until the surface temperature of the head part of the rail falls from 800°C to 450°C at an accelerated cooling speed preferably of 1°C/sec to 20°C/sec. To overcome rejection, it is recommended to change “when” to –until--.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 10 to 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over English translation of Japanese patent 59031824 (“JP-824”) for the reasons set forth in the previous office action dated June 11, 2009.

***Response to Arguments***

9. Applicant's arguments filed December 10 2009 have been fully considered but they are not persuasive.

10. Applicant argued that when cooling rail in the upright position, JP-824 utilizes insulation at the bottom of rail while present invention does not.

11. In response to argument, JP-824 discloses a rail manufacturing method in figure 5, which is referred to as comparative example C, comprising the steps of hot rolling billet into the form of a rail having high temperature of about 700°C followed by cooling in the upright position on a cooling bed with no insulation in the temperature range of 400 to 250°C as recited by claim 1. Although example C is a comparative example and not representative of the invention of JP-824, it is still published and known in the art and can be applied as prior art over Applicant's invention.

12. Applicant's arguments in regard to Rejection under 35 U.S.C.103 as being unpatentable over U.S. Patent No. 1,456,944 to Stenbol in view of U.S. Patent No.6, 432,230 to Kock are persuasive. Therefore Rejection has been withdrawn. Stenbol teaches cooling rail by vertically suspending rail with an upending beam C and a clamp whereas inventive claims recites cooling rail in an upright position on a cooling bed.

***Allowable Subject Matter***

13. Claims 7 to 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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14. Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: A rail manufacturing method as recited by claims 7 to 9, 13 and 14 is not taught or suggested by the art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on monday-friday 6:00 am-2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah Yee/  
Primary Examiner  
Art Unit 1793

/DY/